

O
mt
A2

PRELIMINARY AMENDMENT
CHAPT II of PCT/AU00/00056

said incident light by said PPCT is in the range of 320-600 nm, and maximal fluorescence emission by said PPCT is in the range 300-700 nm.

Claim 2. (Amended) The isolated polynucleotide molecule of claim 1, wherein said PPCT has a maximal absorbance of said incident light in the range of 550-580 nm, and a maximal fluorescence emission in the range of 400-630 nm.

Claim 3. (Amended) An isolated polynucleotide molecule comprising a nucleotide sequence encoding a pigment protein from coral tissue (PPCT), wherein said polynucleotide molecule comprises a nucleotide sequence encoding a protein having the N-terminal amino acid sequence:

SVIAK (SEQ ID NO:1).

Claim 4. (Amended) An isolated polynucleotide molecule comprising a nucleotide sequence encoding a pigment protein from coral tissue (PPCT), wherein said polynucleotide molecule comprises a nucleotide sequence encoding a protein having the N-terminal amino acid sequence:

SVIAKQMTYKVYMSGTV (SEQ ID NO:2).

Claim 5. (Amended) The isolated polynucleotide molecule of claim 1, 2, 3 or 4, wherein said PPCT comprises a chromatophore region comprising the amino acid sequence: QYG.

Claim 6. (Amended) The isolated polynucleotide molecule of claim 5, wherein said polynucleotide molecule comprises a nucleotide sequence encoding a protein having an amino acid sequence corresponding to the sequence shown as SEQ ID NO:3 or 4.

Qd
Q2

PRELIMINARY AMENDMENT
CHAPT II of PCT/AU00/00056

Claim 7. (Amended) The isolated polynucleotide molecule of claim 5, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 80% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 8. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 90% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 9. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 95% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 10. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence substantially corresponding to the sequence shown as SEQ ID NO:5 or 6.

Claim 11. (Amended) A substantially pure protein comprising the N-terminal amino acid sequence:

SVIAK (SEQ ID NO: 1}.

Claim 12. (Amended) A substantially pure protein comprising the N-terminal amino acid sequence:

SVIAKQMTYKVYMSGTVN (SEQ ID NO:2).

Q3
Q4

Claim 14. (Amended) The protein of claim 13, wherein said protein can be purified from coral tissue from a coral family selected from the group consisting of: Pocilloporidae, Acroporidae, Poritidae, Faviidae, Merulinidae and Fungiidae.

Claim 17. (Amended) A vector comprising a polynucleotide molecule of claim 1, 2, 3 or 4.